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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,161	12/12/2003	Hyun-Woo Park	21C-0084	1648

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EXAMINER

GILMAN, ALEXANDER

ART UNIT PAPER NUMBER

2833

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/735,161	PARK, HYUN-WOO	
	Examiner	Art Unit	
	Alexander D Gilman	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 11-13, 20, 21, 24, 27 and 28 is/are rejected.
- 7) ☒ Claim(s) 8-10, 14-19, 22, 23, 25, 26, 29 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7, 12, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Radons et al .

With regard to claims 1-3, 7, Radons et al (US 5,605,150) disclose (Fig. 3) a connector for electrically connecting first data lines to second data lines, comprising:

a first connection part (60) including'

a plurality of connection pins (140) ,

a supporting body (132) that holds the connection pins; and

a first and second guide body (120, 130) extended from a first longitudinal end of the supporting body in a direction substantially perpendicular to a longitudinal direction of the supporting body, the guide body having a guide groove (126) formed at an inner face of the guide body; and

a second connection part (64) including a plurality of connection slots that receive the connection pins to provide electrical connection between the first data lines and the second data lines, the

connection slots each having an entrance hole at a front face of the second connection part;

a side face (the side face of 110) extended from the front face in a direction substantially perpendicular to a longitudinal direction of the front face;

a first and second guide step (104a) formed on the side face to be inserted into the guide groove;

a first and second warpage preventing protrusion (103a, 103b) formed on the guide step to prevent the connection pins from being bent at the time of detaching the first connection part from the second connection part.

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. With regard to claims 12, 13 Radons et al disclose that the side face has a width larger than a width of the guide step.

Claims 1-3, 7, 12, 13, 20, 21, 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Yong et al

With regard to claims 1-3, 7, 24 Yong et al (US 5,980,273) disclose (Fig. 7, 8) a connector for electrically connecting first data lines to second data lines, comprising:

a first connection part (110) including a plurality of connection pins (Fig. 7) ,

a supporting body (114) that holds the connection pins; and

a first and second guide body (120, 120) extended from a first longitudinal end of the supporting body in a direction substantially perpendicular to a longitudinal direction of the supporting body, the guide body having a guide groove (121a) formed at an inner face of the guide body; and

a second connection part (112) including a plurality of connection slots that receive the connection pins to provide electrical connection between the first data lines and the second data lines, the connection slots each having an entrance hole at a front face of the second connection part;

a side face (the side face of 112) extended from the front face in a direction substantially perpendicular to a longitudinal direction of the front face;

a first and second guide step (122) formed on the side face to be inserted into the guide groove;

a first and second warpage preventing protrusion (the wedge front portions of 122) formed on the guide step to prevent the connection pins from being bent at the time of detaching the first connection part from the second connection part.

With regard to claims 12, 13 Yong et al disclose that the side face has a width larger than a width of the guide step and a widthwise center of the guide step is offset from a widthwise center of the side face.

With regard to claims 20, 21, 24 Yong et al disclose that the guide body has a chamfer (Fig. 8) formed at an inner corner of an edge opposite to the supporting body, said chamfer in contact with the side face .

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Radons et al in view of Bixler et al .

Radons et al disclose all of the limitations except of differences in geometrical characteristics and relationships between the first and the second guide bodies and respective guide portions

Bixler et al (US 5,466,171) disclose (Fig. 2-4) differences in geometrical characteristics and relationships between the first and the second guide bodies and respective guide portions

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide differences in geometrical characteristics and relationships between the first and the second guide bodies and respective guide portions, as taught by Bixler, to prevent reversed mating of the components.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Radons et al in view of Wandler

. Radons et al disclose all of the limitations except for the connection slots each including a connection terminal that electrically connects a corresponding connection pin to a corresponding second data line, the connection terminal having a fixing portion for securely gripping the connection pin.:

Wandler (US 5,486,124) disclose the connector terminal having a fixing portion (40) for securely gripping the connection pin.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the connection terminal having a fixing portion for securely gripping the connection pin, as taught by Wandler , to dependably fix the pin in the socket.

Claims 27, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furuya et al in view of Yong et al.

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Furuya et al (US 5,193,069) disclose (Fig. 2) liquid crystal display device comprising:
a liquid crystal display panel (71) that processes image data signals to display images
by controlling liquid crystal disposed in the liquid crystal display panel;
a driving module (711) that provides the liquid crystal display panel with driving
signals to control the liquid crystal in the liquid crystal display panel; and
a connector (701) that provides electrical connection between the driving module and
an external device.

Furuya does not explicitly disclose the structural features of the connector as claimed.

Yong et al disclose the structural features of the connector as applied to claims 1, 24, above.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Furuya with the connector taught by Yong et al, to provide dependable plug-socket connectors mating.

Allowable Subject Matter

Claims 8-10, 14-19, 22, 23, 25, 26, 29, 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

No prior art has been found to anticipate or render obvious the presently claimed subject matter.

Specifically, none of the prior art of record discloses the combination of the limitations presented including the first guide body portion to be in contact with the side face when the first and second connection parts are combined; and a second guide body portion to be in contact with the guide step when the first and second connection parts are combined (claims 8-10)

the/warpage preventing protrusion being protruded at an end portion of the guide step adjacent to the front face, the warpage preventing protrusion being placed in the guide groove to support the guide body when the first connection part is rotated to be detached from the second connection part (claims 14-17);
the cover including a connection member formed at a side face of the cover to be in contact with the guide body when the first connection part is received in the cover (claims 18,19);

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the warpage preventing opening formed at a corner at which the side face, the front face and the guide step meet each other, the warpage preventing opening being extended from a connection slot adjacent to the side face. (claims 22, 23, 25, 26, 29, 30).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander D Gilman whose telephone number is 571 272-2004. The examiner can normally be reached on Monday-Friday, 10:30 a.m. - 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571 272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11/09/2004


ALEXANDER GILMAN
PRIMARY EXAMINER